

Wildlife Education: changing in the wind



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Survey of programs

- United States
 - UnivSource
 - www.univsource.com/region.htm
- Canada
 - Association of Universities and Colleges of Canada
 - www.aucc.ca/index_e.html
 - Eco Canada
 - www.eco.ca/Portal/default.aspx

The screenshot shows the UnivSource website. At the top, the UnivSource logo is on the left, and the text "now with a free VOCAB. builder" is on the right. Below the logo is the tagline "Your most comprehensive Information on Universities". A navigation bar shows "You're Here : UnivSource Home > US Universities by State(American Universities)". On the right, there is a link to "State Colleges & Universities" with the text "Move your career forward with accredited online degree! www.CourseAdvisor.com". Below this is a blue button with "<>" symbols. The main heading is "US Colleges, Community Colleges, & Universities by State". Below this is a banner for the "Association of Universities and Colleges of Canada" with a logo and text in English and French. To the right of the banner is a yellow box with the text "Universities by S". Below the banner is a "Spotlight On" section with two items: "AUCC Media" with a stack of papers icon and "University A" with a blue 'U' icon. To the right of the spotlight is a row of five small images: a person in a field, a person holding a flask, a person with a magnifying glass, a person with a laptop, and a person with a camera. Below these images is a row of five colored boxes: "Practitioners" (green), "Employers" (blue), "Educators" (red), "Students" (yellow), and "Students" (yellow). Each box has a "LEARN MORE" button.

UnivSource

now with a free VOCAB. builder

Your most comprehensive Information on Universities

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State Colleges & Universities

Move your career forward with accredited online degree!
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<>

US Colleges, Community Colleges, & Universities by State

Association of Universities and Colleges of Canada

Association des universités et collèges du Canada

Universities by S

Spotlight On

AUCC Media

One-stop information for journalists on line

University A

Visit our newly updated website today!

Practitioners

Find jobs, post your resume, get certified and more

Employers

Post jobs, search resumes, gain wage subsidies, and more

Educators

Develop curriculum, support student careers, and promote programs, and more

Students

Research careers, choose schools, build your resume, and more

LEARN MORE

LEARN MORE

LEARN MORE

LEARN MORE

LEARN MORE



Survey response

- United States

- 3,413 University & College websites
- 526 Programs (excl BA)
 - 61 traditional members of North American University Fish and Wildlife Programs (NAUFWP)
 - 40 Cooperative Fish and Wildlife Unit programs

- Canada

- 77 Universities; 120 Colleges listed AUCC and EcoCanada
- 92 Programs
 - 50 University
 - 42 Colleges
 - None NAUFWP

Survey Questionnaire

- We contacted 526 (US) programs by email or telephone follow-up
- Asked
 - What programs & degrees offered
 - Number of courses and faculty by disciplines
 - Average enrollment & trend
 - Percent hands-on classes
 - Require or meet TWS certification



Dear Faculty Member,

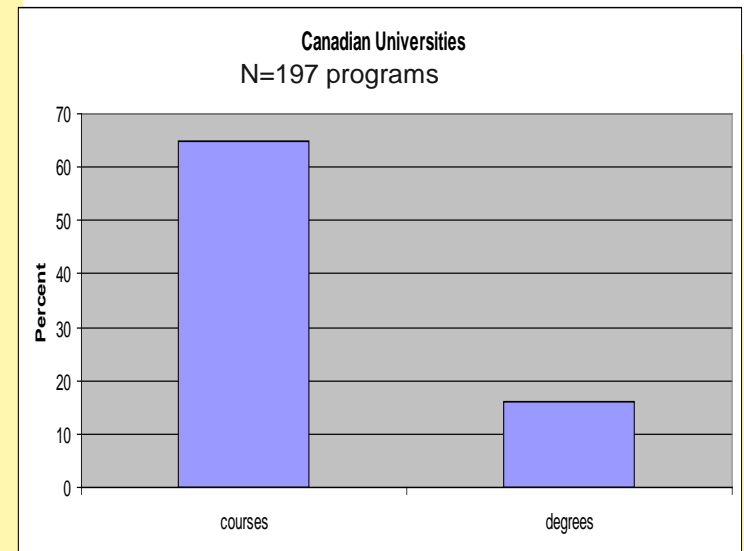
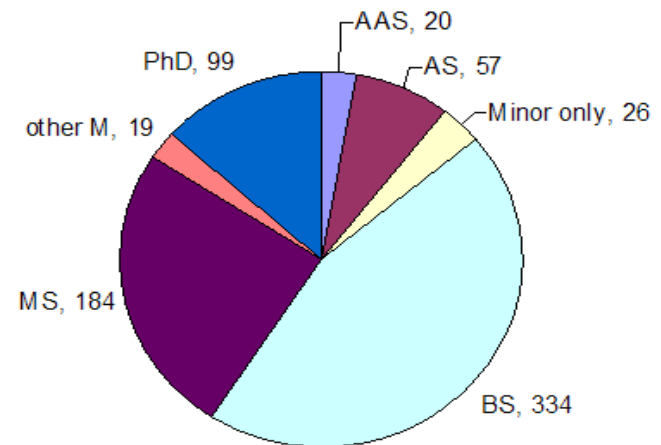
The Wildlife Society has created an Ad Hoc Committee to inventory Collegiate Environmental, Wildlife, and Natural Resources Programs. Our web-search indicated that your program(s) may include the kinds of courses we are trying to list. We are requesting your help to update the information available on The Wildlife Society web page. Please take a few minutes to check the information we have and answer some additional questions about your program.

Our current Institution and contact information for your program includes:

State	University	city	dept link	Department name	degree name	contact	phone contact
What degrees do you offer (pre-, AS, AAS, BA, BS, Minor, MA, MS, PhD other)?							
Please list the names of the degree programs you offer.							
How many courses do you offer in each of these disciplines?							

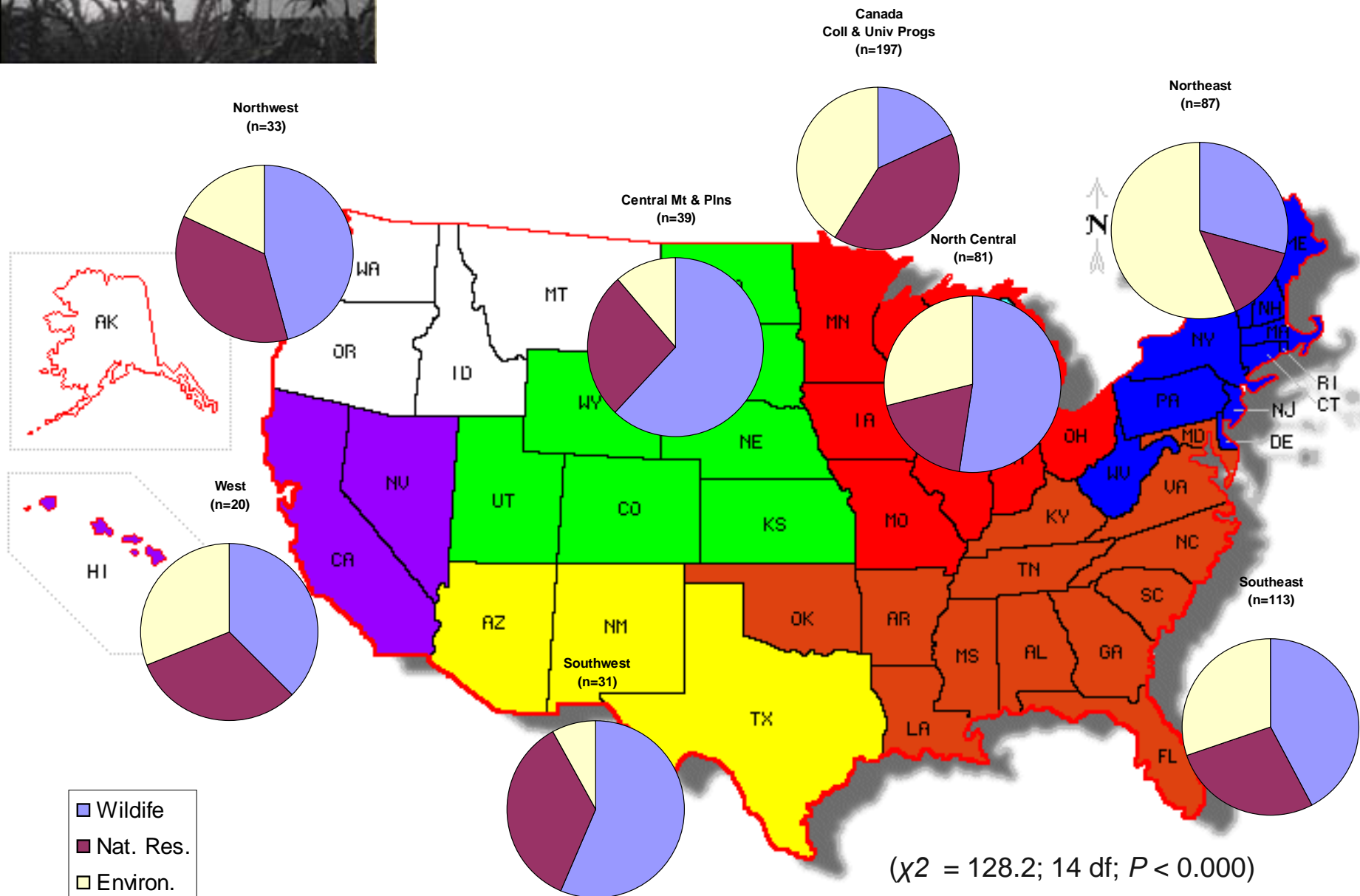
Survey results

- TWS had listed only 101
- We documented 739 programs at 442 Colleges & Universities in US.
 - excluded BA and links only to field station programs
- Canadian Universities 65% offered wildlife related courses
 - but only 16% of those offering courses had programs that led to wildlife related degrees



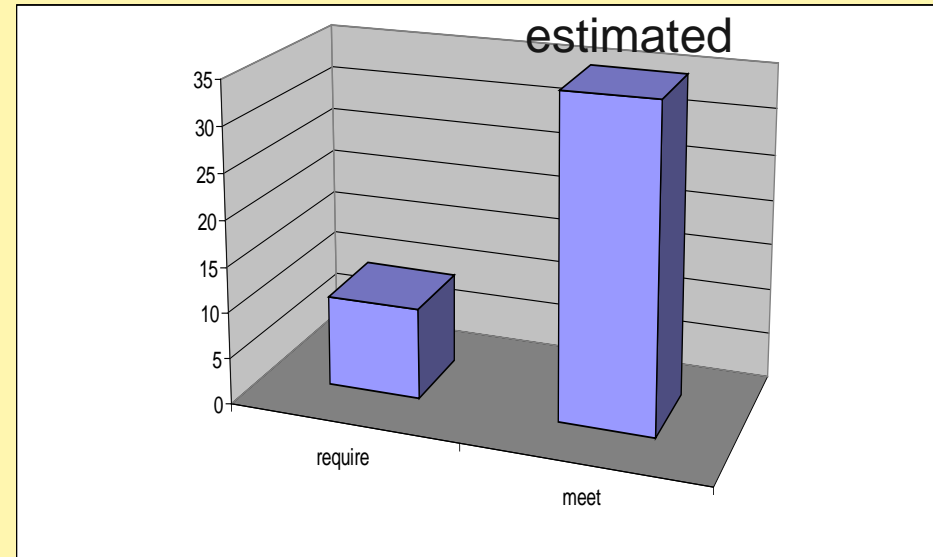


Programs by TWS Section



TWS certification

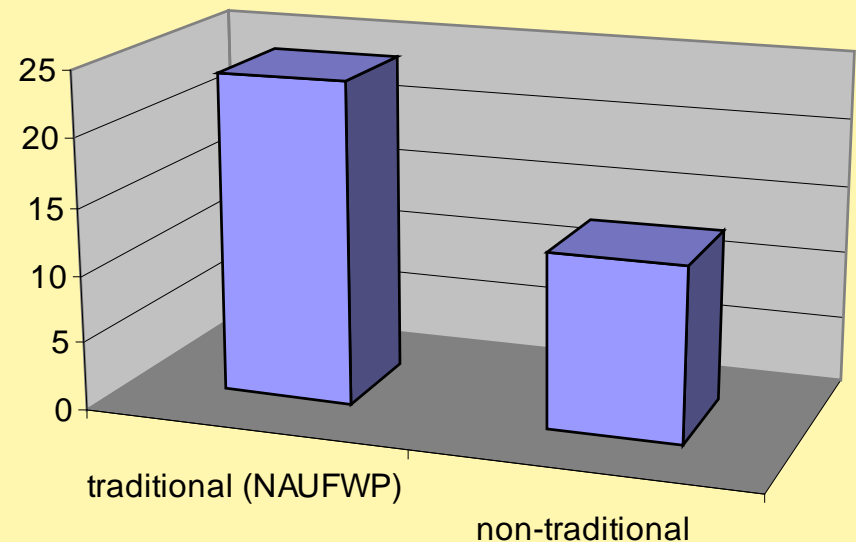
- Of the 442 US programs we contacted, only ~10% require courses that meet TWS certification for graduation
- Based on responses, we estimate that another 25% offer classes that could meet certification
- In Canada, all 16 Universities with programs could meet, but none require, courses sufficient for certification



Enrollment trends

- Nearly 24% of traditional (NAUFWP) programs reported declining enrollment; only 13% percent of non-traditional programs reported declines.
- However, this reported difference was not significant.

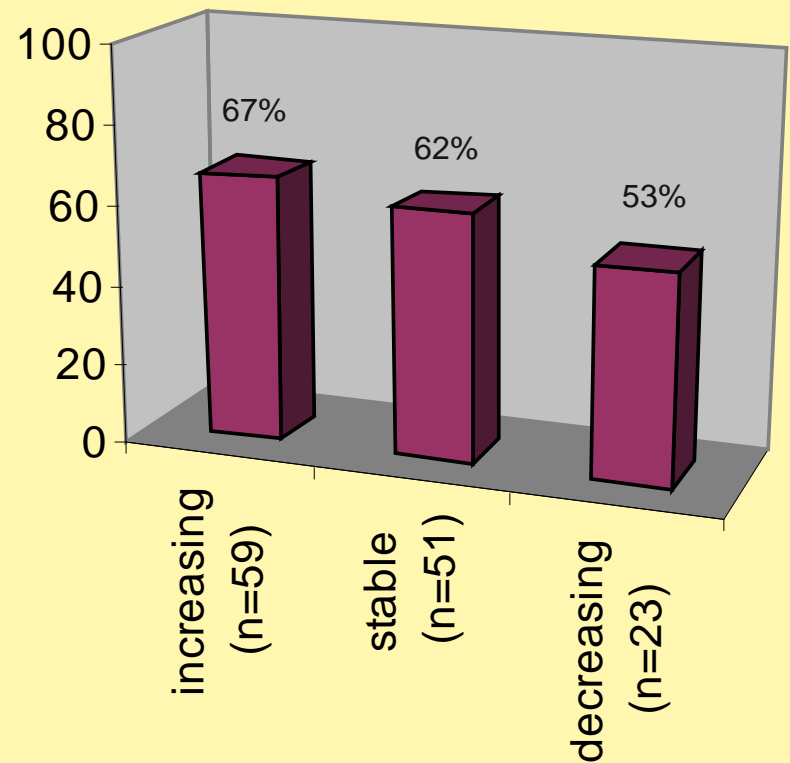
Reported declining enrollment trend



($\chi^2 = 2.592$, 2 df, $P = 0.274$)

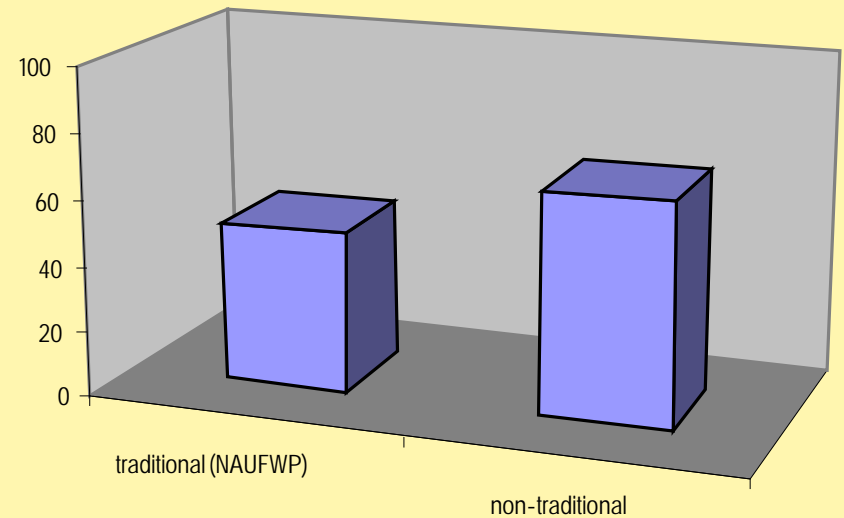
Hands-on classes

- Increasing enrollment was related to percent of hands-on courses in the curriculum
- Size of programs (number of students enrolled) was not well correlated ($r = -0.067$) with percent of hands-on curricula reported.



Hands-on classes (%)

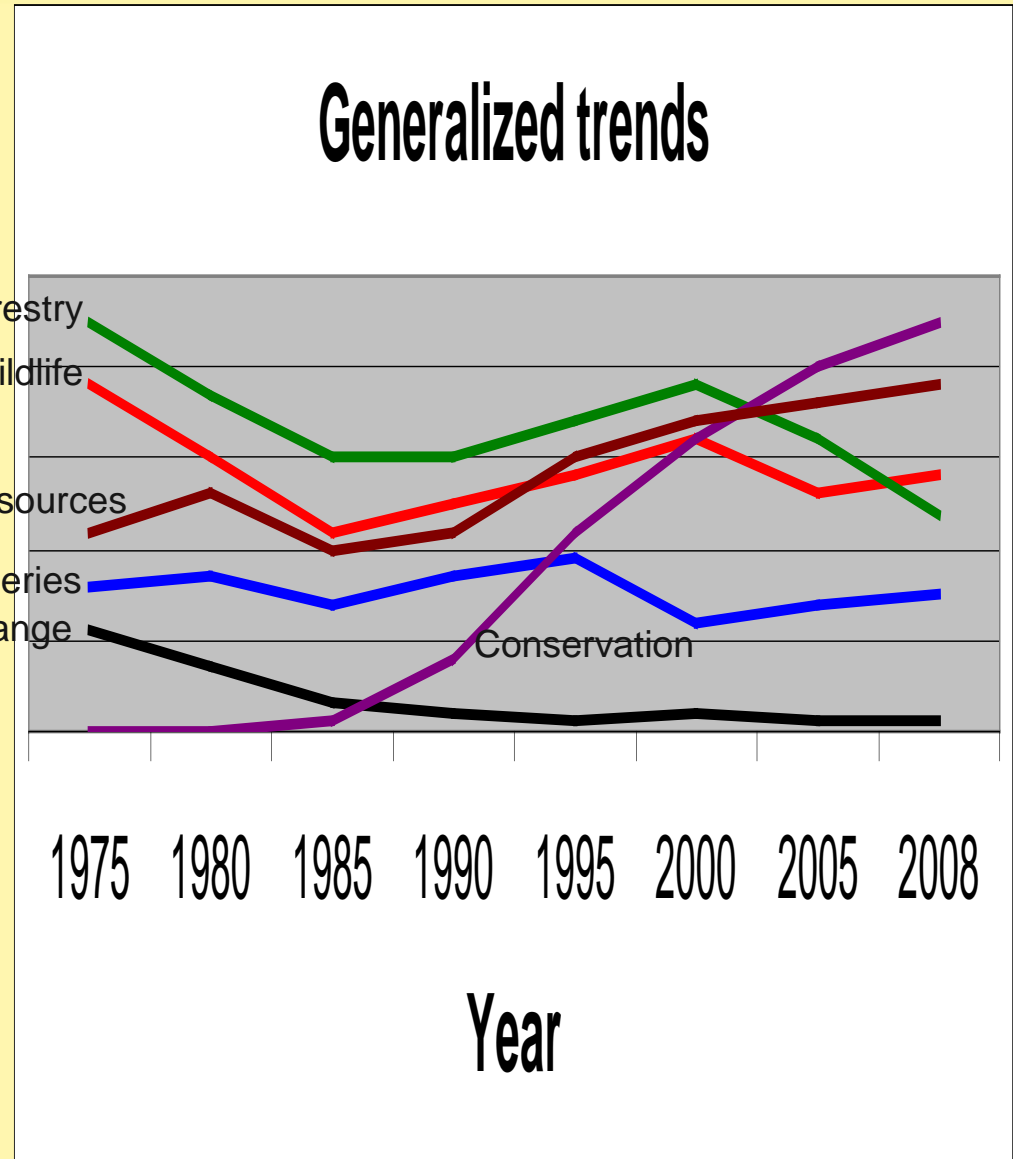
- Traditional programs (NAUFWP members) had lower percent hands-on curricula (49.0 ± 22.2) than did non-NAUFWP programs (67.5 ± 26.2).



Student's $t = -3.5509$, 130 df, $P = 0.0005$

Enrollment trends

- Qualitative data
- 'Commodity' programs declining
- 90's Shift to Natural Resources
- Rapid growth Conservation programs





Curricula trends

- Increasing General Education requirements
- Total degree credit hour caps
- Increased emphasis on research \$\$
 - Concurrent devaluation of undergraduate teaching in P&T decisions
- Reduced field experience
 - Costs: travel, faculty time, field stations



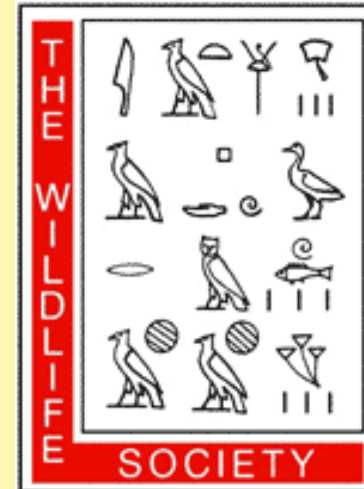
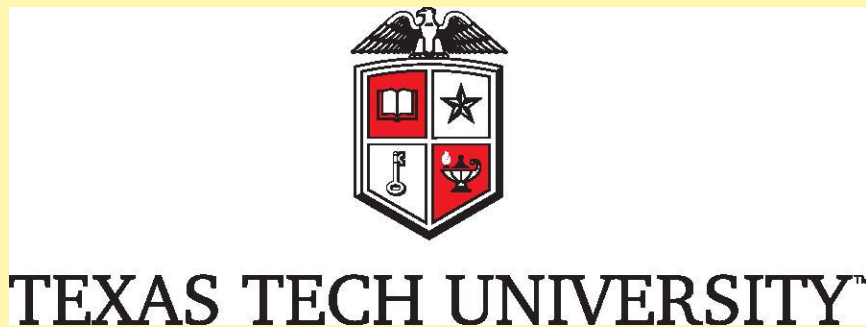
Summary

- **More programs - increased competition**
 - ‘Wildlife’ classes offered by diverse programs
 - Increase/shift to conservation programs
- **Reduction in hands-on skill building field classes attractive to students and demanded by employers**
 - New business model of higher education
 - Demands on faculty
- **Changing public – Changing enrollments**
 - Motives for today’s more urban undergraduates
 - Driven by television? Do we know?

‘Blowing in the wind’



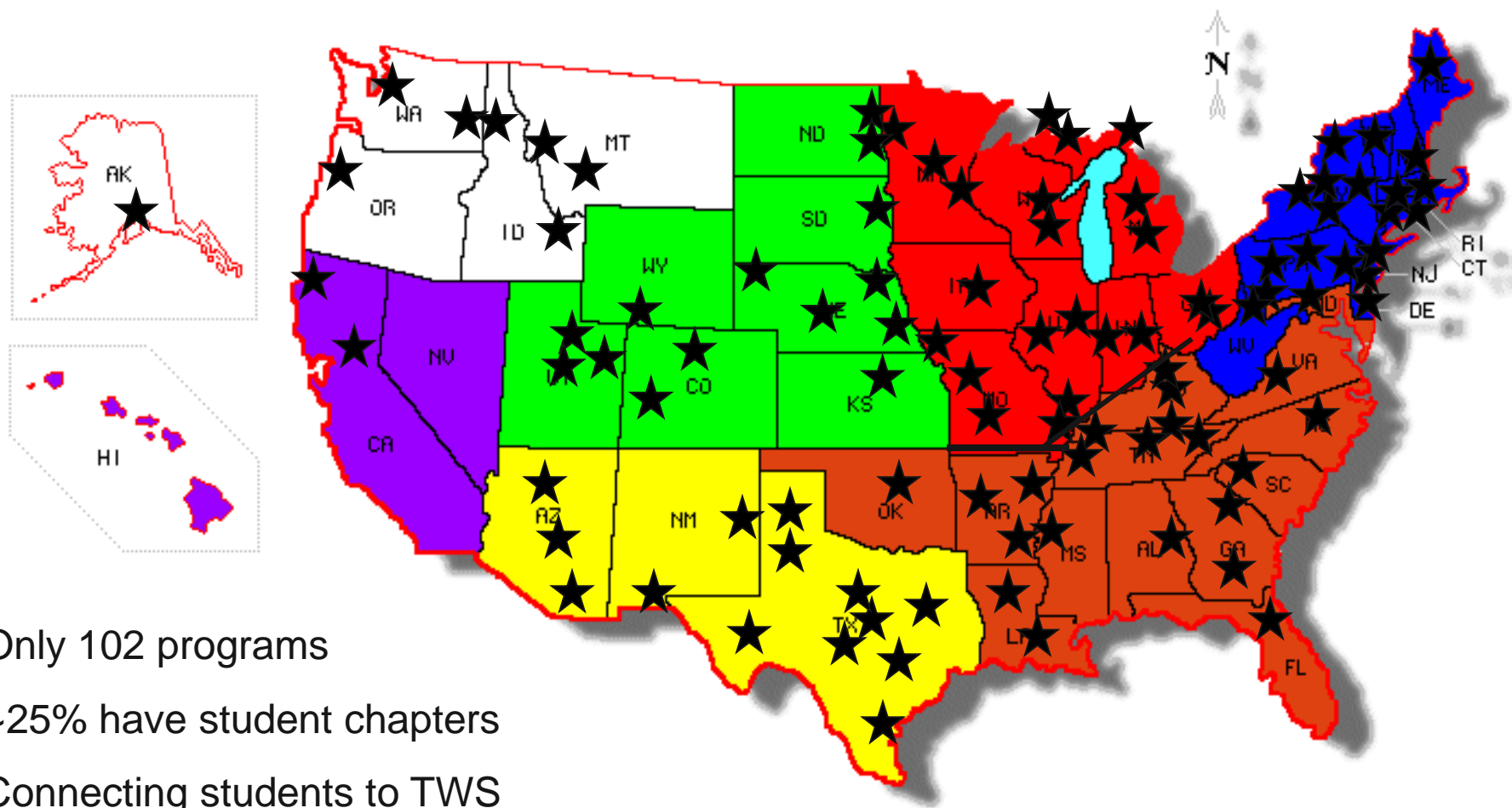
Acknowledgments



- Wallace, M. C., and R. Baydack. 2009. Diversity of options for wildlife education. Transactions of the 74th North American Wildlife and Natural Resources Conference. Washington D.C.



TWS Student chapters



Only 102 programs

~25% have student chapters

Connecting students to TWS

